Insert the attached paper copy of the Sequence Listing in lieu of pages 52-58 of the specification (i.e., the Sequence Listing submitted on February 20, 1997), and number pages accordingly.

IN THE CLAIMS:

Please amend the claims as follows.

C1

1. (Amended) A library of DNA sequences, each sequence encoding a zinc finger polypeptide for display [on a viral particle], the zinc finger polypeptide comprising at least [three zinc fingers, with] one zinc finger having partially randomised allocation of amino acids [being positioned between two or more zinc fingers having defined amino acid sequence], the partially randomised zinc finger having a random allocation of amino acids at positions -1, +2, +3 and +6 and at least one of positions +1, +5 or +8, position +1 being the first amino acid in the α-helix of the zinc finger.

Claim 3, line 1, replace "claim 2" with --claim 1--.

C2

4. (Amended) A library according to claim 1 [in a form suitable for cloning] as a fusion with a DNA sequence encoding the minor coat protein of bacteriophage fd.

~~5.~~ (Amended) A method of designing a zinc finger polypeptide for binding to a particular target DNA sequence, comprising ~~of~~ steps ~~of~~:

screening against at least a portion of the target DNA sequence, ~~a plurality of~~ zinc finger polypeptides having partially randomised zinc finger [positioned between two or more zinc fingers having defined amino acid sequence], the portion of the target DNA sequence being sufficient to allow binding of some of the zinc finger polypeptides, the ~~plurality~~ ~~of~~ zinc finger polypeptides being encoded by a library in accordance with claim 1; and

selecting those nucleic acid sequences encoding randomised zinc fingers which bind to the target DNA sequence.

~~7.~~ (Amended) A method of designing a zinc finger polypeptide for binding to a particular target DNA sequence, comprising the steps of:

comparing the binding to one or more DNA triplets of each of a plurality of zinc finger polypeptides having a partially randomised zinc finger [positioned between two or more zinc fingers having defined amino acid sequence], the zinc finger

polypeptides being encoded by a library in accordance with claim 1; and

selecting those nucleic acid sequences encoding randomised zinc fingers [exhibiting preferred binding characteristics] which bind to the target DNA sequence.

6. (Amended) A method of designing a zinc finger polypeptide for binding to a particular target DNA sequence, comprising the steps of:

screening against at least a portion of the target DNA sequence a plurality of zinc finger polypeptides having a partially randomised zinc finger [positioned between two or more zinc fingers having defined amino acid sequence], the portion of the target DNA sequence being sufficient to allow binding of some of the zinc finger polypeptides, the plurality of zinc finger polypeptides being encoded by a library in accordance with claim 1;

comparing the binding to one or more DNA triplets of each of [a] said plurality of zinc finger polypeptides having a partially randomised zinc finger positioned between two or more zinc fingers having defined amino acid sequence; and

selecting those nucleic acid sequences encoding randomised zinc fingers [exhibiting preferred binding characteristics] which bind to the target DNA sequence.

7. (Amended) A method of designing a zinc finger polypeptide for binding to a particular target DNA sequence, the method comprising the steps of:

screening against at least a portion of the target DNA sequence, ~~a plurality of~~ zinc finger polypeptides having a partially randomised zinc finger [positioned between two or more zinc fingers having defined amino acid sequence], the portion of the target DNA sequence being sufficient to allow binding of some of the zinc finger polypeptides, the ~~plurality of~~ zinc finger polypeptides being encoded by a library in accordance with claim 1;

comparing the binding to one or more DNA triplets of each of [a] said ~~plurality of~~ zinc finger polypeptides having a partially randomised zinc finger [positioned between two or more zinc fingers having defined amino acid sequence];

selecting certain of the screened randomised zinc fingers for analysis of [preferred] binding characteristics;

C5

and combining those sequences encoding desired zinc fingers to form a sequence encoding a single zinc finger polypeptide [having the desired binding specificity].

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~~10.~~ (Amended) A method of designing a zinc finger polypeptide for binding to a particular ~~DNA~~ DNA target sequence, wherein ~~a plurality of~~ sequences encoding individual zinc fingers selected by the method of claim 11 are randomly combined in the appropriate order to encode ~~a plurality of~~ zinc finger polypeptides, the zinc finger polypeptides being screened against the target sequence, that combination of zinc finger sequences encoding a zinc finger polypeptide [having optimal binding characteristics] which binds to the target DNA sequence ~~being selected for use~~.

19

~~11.~~ (Amended) A DNA library according to claim 1, consisting of 64 sequences, each sequence comprising a different one of the 64 possible permutations of a DNA triplet, the library being arranged in twelve sublibraries, wherein for any one sub-library one base in the triplet is defined and the other two bases are randomised[, the sequences being in a form suitable for use in the selection method of claim 8].

21 ~~12.~~ (Amended) A library according to claim ~~11~~ 19, wherein the sequences are associated[, or are capable of being associated,] with separation means.

22 ~~13.~~ (Amended) A library according to claim ~~12~~ 21, wherein the separation means is selected from the group consisting of microtitre plate, magnetic bead, non-magnetic bead, sedimentation particle, and affinity chromatography column [one of the following: microtitre plate; magnetic or non-magnetic beads or particles capable of sedimentation; and an affinity chromatography column].

23 ~~15.~~ (Amended) A kit for making a zinc finger polypeptide for binding to a nucleic acid sequence of interest, comprising: a library of DNA sequences according to claim 1 encoding zinc finger polypeptides [of known binding characteristics] ~~in a form suitable for cloning~~ into a vector; a vector molecule that accepts ~~suitable for accepting~~ one or more sequences from the library; and instructions for use.

25 ~~11.~~ (Amended) A kit according to claim ~~15~~ 23, wherein the vector [is capable of directing] directs the expression of the cloned sequences as a single zinc finger polypeptide displayed on the surface of a viral particle.

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Claim 20, line 1, replace "claim 18" with --claim 19--.

15 ~~38~~. A method according to claim ~~32~~ 14, further comprising the step of separating the zinc finger polypeptide and the sequence of interest specifically bound thereto, [(and nucleic acid sequences specifically bound thereto)] from the rest of the sample.

Please cancel claims 18, 23-31 and 37-42 without prejudice and add the following new claims.

8 --~~43~~. A method for producing a zinc finger polypeptide for binding to a particular target DNA sequence, comprising the steps of:

screening against at least a portion of the target DNA sequence, ~~a plurality of~~ zinc finger polypeptides having a partially randomised zinc finger, the portion of the target DNA sequence being sufficient to allow binding of some of the zinc finger polypeptides, the ~~plurality of~~ zinc finger polypeptides being coded by a library in accordance with claim 1;

selecting those nucleic acid sequences encoding randomised zinc fingers which bind to the target DNA sequence; and

expressing the selected nucleic acid sequences to produce zinc finger polypeptides which bind to the target DNA sequence.

9 ~~44~~. A library according to claim 1, wherein the zinc finger polypeptide is displayed on a viral particle.

10 ~~45~~. A library according to claim 1, wherein the partially randomised zinc finger is positioned between two or more zinc fingers.

C10 30 ~~46~~. A library of DNA sequences, each sequence encoding a zinc finger polypeptide for display, the zinc finger polypeptide comprising at least one zinc finger having partially randomised allocation of amino acids, the partially randomised zinc finger having a random allocation of amino acids at positions -1, +1, +2, +3 and +6, position +1 being the first amino acid in the α-helix of the zinc finger.

31 ~~47~~. A library according to claim 30 ~~46~~, wherein the partially randomised zinc finger further has a random allocation of amino acids at position +5.

32 ~~48~~. A library according to claim 31 ~~47~~, wherein the zinc finger polypeptide is displayed on a viral particle.

33 31

~~49~~. A library according to claim ~~47~~, wherein the partially randomised zinc finger is positioned between two or more zinc fingers.

34 30

~~50~~. A library according to claim ~~46~~, wherein the partially randomised zinc finger further has a random allocation of amino acids at position +8.

C10 35 34

~~51~~. A library according to claim ~~50~~, wherein the zinc finger polypeptide is displayed on a viral particle.

36 34

~~52~~. A library according to claim ~~50~~, wherein the partially randomised zinc finger is positioned between two or more zinc fingers.

37

~~53~~. A library of DNA sequences, each sequence encoding a zinc finger polypeptide for display, the zinc finger polypeptide comprising at least one zinc finger having partially randomised allocation of amino acids, the partially randomised zinc finger having a random allocation of amino acids at positions -1, +2, +3, +5 and +6, position +1 being the first amino acid in the α-helix of the zinc finger.